

The remaining mile: How do you persuade uncertain Americans to get vaccinated against COVID-19?

Introduction

Almost a year after the first COVID-19 vaccines came to market at historic speed, nearly 34% of the eligible U.S. population (those 12 years of age and older) remains fully unvaccinated. In many communities, the number is much higher.

In stark contrast to early 2021, when a vaccine appointment was coveted by many and the primary challenge was meeting public demand, vaccination rates across the U.S. have largely plateaued. This pattern is typical of many public health outreach campaigns. An influx of early adopters eager to embrace a product or service causes uptake rates to surge, but soon adoption begins to taper. Not long after that, campaigns run into the most challenging phase: reaching the last few people.

Over the last year, Civis conducted several COVID-19 vaccine [message tests](#) to understand what message themes were most persuasive, and which might backfire. In the spring of 2021, before the Delta variant emerged in the U.S. and when vaccine mandates had not yet been implemented, we found that messages highlighting experiences that are off-limits to unvaccinated individuals (such as concerts or international travel) or emphasizing personal choice were most persuasive.

This latest research tested some of the same messaging frameworks from the spring as well as a few new strategies. As you'll see in this research, the most persuasive messages have changed. Continuing to use the same strategies deployed at the beginning of the COVID-19 vaccine rollout in order to reach the remaining individuals simply won't work.

Please feel free to [reach out](#) with thoughts, questions, or ideas.

– Crystal Son, MPH, Director of Healthcare Analytics at Civis Analytics

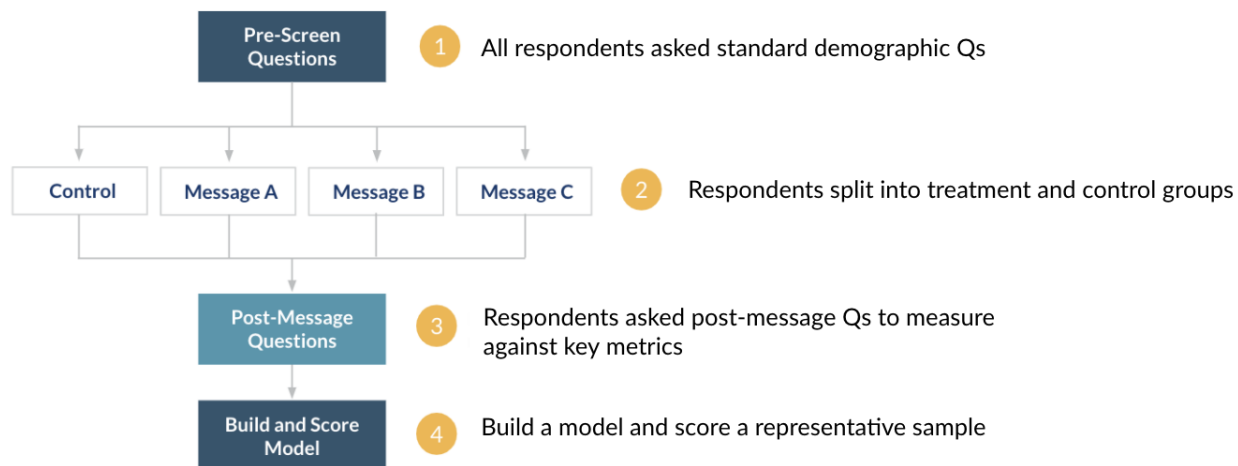
Methodology

From Aug. 19 to Sept. 8, 2021, we tested eight distinct message themes in an online randomized controlled trial of 5,110 unvaccinated adults from across the U.S. Participants saw one of the following messages:

- **“Vaccine Safety”** highlighted the safety of the COVID-19 vaccines: the rigorous FDA process that was followed, the diversity of clinical trial participants, and the rarity of serious side effects.
- **“FOMO”** emphasized the daily activities that vaccinated individuals can enjoy, and highlighted experiences that may be off-limits to non-vaccinated individuals, such as concerts and international travel.
- **“Scary COVID Statistics”** focused on the dangers of COVID (particularly because of the increased contagiousness of the Delta variant and potential to cause more serious illness), and the importance of getting vaccinated in order to stop these statistics from rising.
- **“Personal Story”** used a true story [posted](#) to social media by an Alabama physician describing unvaccinated patients under her care dying of COVID and begging to be vaccinated.
- **“Patriotism”** positioned the vaccines as an example of American ingenuity, trumpeting vaccination as the ultimate expression of freedom, liberty, and country.
- **“Personal Decision”** emphasized that it’s normal to have questions about the vaccine, encouraged learning more, and positioned vaccination as a person's individual choice.
- **“Protecting Children”** described the rise in COVID among children and emphasized that when adults get vaccinated, this helps protect children, especially those under 12 years of age who are not yet eligible for the vaccine.
- **“Financial Costs”** reinforced that a severe case of COVID-19 can be expensive and that vaccination can help avoid financial burden.
- The final group (the control group) saw no message.

Before testing the different messages, we asked qualifying questions allowing us to break up findings by subgroups such as race, age, gender, and previous COVID diagnosis. Respondents were then randomly exposed to one of the messages, or placed in a control group that saw no message.

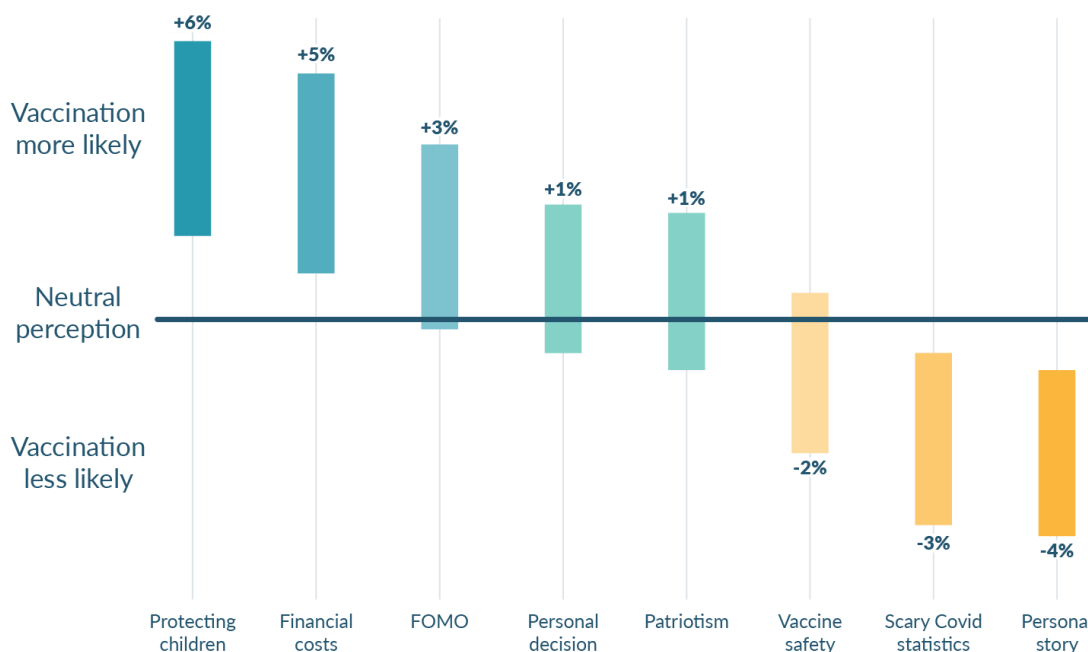
After displaying the messages, we asked respondents about their intent to get vaccinated; a statistical model calculated the impact of each treatment compared to the non-treated group, while controlling for respondent characteristics.



Findings

The “Protecting Children” message was the most effective at persuading unvaccinated individuals, increasing likelihood to vaccinate by 6 percentage points (pp) on average, with very low risk of backfiring (in this case, lowering intent to vaccinate). The second most persuasive message was “Financial Costs,” which resulted in a 5pp increase in likelihood to vaccinate.

Vaccination Likelihood - Key Findings



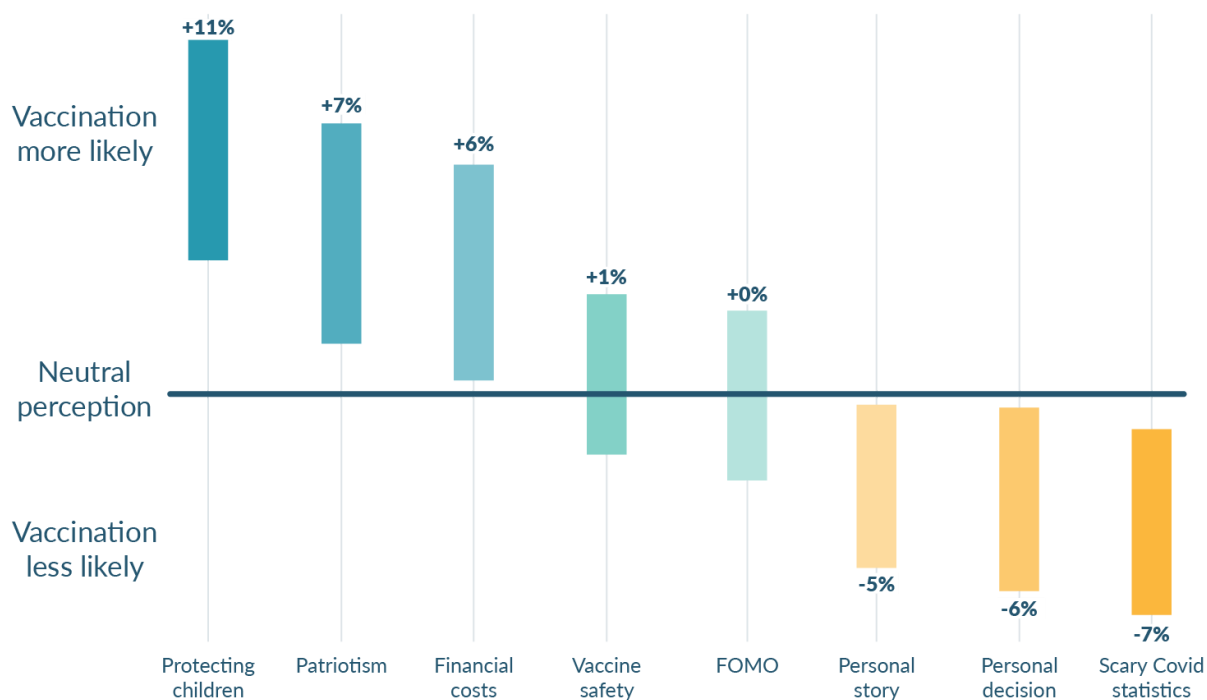
Shaded areas represent 95% credible interval

On average, “FOMO,” “Personal Decision,” and “Patriotism” were only marginally persuasive, and the remaining three messages – “Vaccine Safety,” “Scary COVID Statistics,” and “Personal Story” – were actually likely to *decrease* a person’s intent to vaccinate.

Compared to findings from previous tests, these findings are far more nuanced. More than ever, what is on average most persuasive for all is not necessarily persuasive for certain subgroups.

For example, for unvaccinated white Americans and higher-income earners, the concept of missing out on concerts, traveling, and eating in restaurants (the “FOMO” message) was more persuasive than “Protecting Children.” And while the “Patriotism” message was largely ineffective across the entire sample of people, it was highly persuasive for unvaccinated Latino/a participants. Similarly, for very conservative individuals, the “Personal Decision” was more effective than “Protecting Children” or “Financial Costs.”

Vaccination Likelihood - Latinx



Shaded areas represent 95% credible interval

In the spring of 2021, we found that “FOMO” and “Personal Decision” were the most persuasive messages on average, resulting in a +5pp increase in intent to vaccinate. In contrast, they had little impact in this latest test. These changes in trends underscore the need for repeated testing over time, because the effectiveness of certain messages is heavily impacted by COVID statistics, policies, and cultural attitudes. The perceived relevance of messages such as “FOMO” and “Personal Decision” may have waned since the spring now that COVID restrictions have largely loosened and mandates have been implemented in many areas, for example.

What is consistent, though, is that fear-based messages such as “Scary COVID Statistics” and “Personal Story” have the opposite intended effect and are highly likely to backfire. Both messages were not only ineffective, but they also reduced likelihood to get vaccinated among participants across all categories. In addition, yet again we see that touting vaccine safety is unlikely to

persuade people, and for some groups (such as males and people 50-64 years old), this strategy may backfire.

Vaccination Likelihood - Age Groups



Shaded areas represent 95% credible interval

Conclusions

As the COVID-19 situation in the U.S. and globally evolves, so too do the most persuasive messages.

In reviewing the results of our message test, we can make a few high-level recommendations for talking about the COVID-19 vaccines:

1. For general messaging targeting all unvaccinated people, focus on protecting children from COVID-19 and on the financial ramifications of contracting the virus.
2. If you know you want to reach a particular subgroup, use messaging that is most effective for that particular subgroup (as outlined in the chart below), as it may be very different from what works for all unvaccinated people.
3. Avoid fear-based messaging, and de-couple vaccine “safety” from vaccine “effectiveness.” Be prepared to respond to concerns about safety and side effects with accurate and straightforward responses, but don’t lead with a message emphasizing safety.

Message Effects by Subgroup

Protecting children	Effective overall, particularly with Asian and Latino/a respondents, along with women, the less educated, and lower income Americans.
Financial costs	Effective overall, particularly with women.
FOMO	Effective with White Americans, 35–49-year-olds, independents, and higher income earners.
Patriotism	Works only for Latino/a Americans.
Personal Decision	Works for very conservative audiences.
Vaccine Safety	Backfires with men, highly educated, and higher income Americans.
Scary COVID Statistics	Backfires more strongly with women than men, as well as the Latino/a population.
Personal Story	Backfires particularly strongly with lower-income workers, Independents and Democrats, and white Americans.

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